Network Integration Kits (NIKs)
Being installed on MATV version of MRAP

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Network Integration Kits (NIKs) developed with Increment 1 of the Army's Brigade Combat Team Modernization Program are being installed on MATV versions of the Mine Resistant Ambush Protected (MRAP) vehicle at White Sands Missile Range in preparation for fielding in 2011 to the 3rd Brigade of the 1st Armored Division when it is deployed to Afghanistan.

The NIK provides the introduction of the Program Executive Office Integration network and fusion of current force capability with the future force. It consists of an integrated computer system hosting the latest communications and radio systems, limited battle command and Systems of Systems Common Operating Environment software. The NIK allows the passage of video and imagery to and from tactical vehicles like the MRAPD.

 "The NIK is platform agnostic, but we know it [MRAP] is going to Afghanistan so it makes sense to try to replicate the environment," said Maj. Gen. Keith Walker, Director of the Future Force Integration Directorate, Fort Bliss, Texas.

They are engineered with technologies that can receive and distribute data, voice, video and images across the force using multiple high bandwidth waveforms; they consist of vehicle-mounted software programmable Joint Tactical Radio Systems (JTRS) such as

the Ground Mobile Radios (GMR), a so-called "dual-enclave" Integrated Computer System (ICS) built to handle classified and unclassified information, and a Blue Force Tracking display screen. The software and operating systems are connected through use of a middle ware called System of Systems Common Operating Environment (SOSCOE).

In addition to providing "networked" combat-relevant information such as sensor feeds from a UAV across the force in real time, the NIKs may help MRAPs overcome some of their mobility restrictions.

"MRAPs are massive; there are some places they can't go. If you want to do recon in some areas you have to dismount soldiers and that involves a risk. However, if I can send a Class I UAS or SUGV [Small Unmanned Ground Vehicle], I can keep soldiers inside the vehicle," said Jerry Tyree, Director of Materiel for Program Executive Office Integration.